SEQUENCE LISTING

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<120> PHYSICAL-CHEMICAL PROPERTY BASED SEQUENCE MOTIFS AND METHODS REGARDING SAME

<130> 265.00400101

<140> 10/817,530
<141> 2004-04-02

<150> US 60/460,769
<151> 2003-04-04

<160> 5

<170> PatentIn version 3.2

<210> 1
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<212> PRT
<213> ARTIFICIAL;MEMBER OF DNase-I SUPERFAMILY

<400> 1

Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys
1 5 10

<210> 2
<211> 275
<212> PRT
<213> ARTIFICIAL;MEMBER OF DNase-I SUPERFAMILY

<400> 2

Leu Tyr Glu Asp Pro Pro Asp Gln Lys Thr Ser Pro Ser Gly Lys Pro
1 5 10 15

Ala Thr Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu Arg Ala Trp
20 25 30

Ile Lys Lys Lys Gly Leu Asp Trp Val Lys Glu Glu Ala Pro Asp Ile
35 40 45

Leu Cys Leu Gln Glu Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu
50 55 60

Leu Gln Glu Leu Pro Gly Leu Ser His Gln Tyr Trp Ser Ala Pro Ser
65 70 75 80

Asp Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro
85 90 95

```
Leu Lys Val Ser Tyr Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly
            100                 105                 110

Arg Val Ile Val Ala Glu Phe Asp Ser Phe Val Leu Val Thr Ala Tyr
        115                 120                 125

Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu Tyr Arg Gln Arg
    130                 135                 140

Trp Asp Glu Ala Phe Arg Lys Phe Leu Lys Gly Leu Ala Ser Arg Lys
145                 150                 155                 160

Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His Glu Glu Ile Asp
                165                 170                 175

Leu Arg Asn Pro Lys Gly Asn Lys Lys Asn Ala Gly Phe Thr Pro Gln
            180                 185                 190

Glu Arg Gln Gly Phe Gly Glu Leu Leu Gln Ala Val Pro Leu Ala Asp
        195                 200                 205

Ser Phe Arg His Leu Tyr Pro Asn Thr Pro Tyr Ala Tyr Thr Phe Trp
    210                 215                 220

Thr Tyr Met Met Asn Ala Arg Ser Lys Asn Val Gly Trp Arg Leu Asp
225                 230                 235                 240

Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys
                245                 250                 255

Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr
            260                 265                 270

Leu Ala Leu
        275
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<210> 3
<211> 268
<212> PRT
<213> ARTIFICIAL;MEMBER OF DNase-I SUPERFAMILY

<400> 3

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Met Lys Phe Val Ser Phe Asn Ile Asn Gly Leu Arg Ala Arg Pro His
1               5                   10                  15

Gln Leu Glu Ala Ile Val Glu Lys His Gln Pro Asp Val Ile Gly Leu
            20                  25                  30
```

```
Gln Glu Thr Lys Val His Asp Asp Met Phe Pro Leu Glu Glu Val Ala
        35                  40                  45

Lys Leu Gly Tyr Asn Val Phe Tyr His Gly Gln Lys Gly His Tyr Gly
    50                  55                  60

Val Ala Leu Leu Thr Lys Glu Thr Pro Ile Ala Val Arg Arg Gly Phe
65                  70                  75                  80

Pro Gly Asp Asp Glu Glu Ala Gln Arg Arg Ile Ile Met Ala Glu Ile
                85                  90                  95

Pro Ser Leu Leu Gly Asn Val Thr Val Ile Asn Gly Tyr Phe Pro Gln
            100                 105                 110

Gly Glu Ser Arg Asp His Pro Ile Lys Phe Pro Ala Lys Ala Gln Phe
        115                 120                 125

Tyr Gln Asn Leu Gln Asn Tyr Leu Glu Thr Glu Leu Lys Arg Asp Asn
    130                 135                 140

Pro Val Leu Ile Met Gly Asp Met Asn Ile Ser Pro Thr Asp Leu Asp
145                 150                 155                 160

Ile Gly Ile Gly Glu Glu Asn Arg Lys Arg Trp Leu Arg Thr Gly Lys
                165                 170                 175

Cys Ser Phe Leu Pro Glu Glu Arg Glu Trp Met Asp Arg Leu Met Ser
            180                 185                 190

Trp Gly Leu Val Asp Thr Phe Arg His Ala Asn Pro Gln Thr Ala Asp
        195                 200                 205

Arg Phe Ser Trp Phe Asp Tyr Arg Ser Lys Gly Phe Asp Asp Asn Arg
    210                 215                 220

Gly Leu Arg Ile Asp Leu Leu Leu Ala Ser Gln Pro Leu Ala Glu Cys
225                 230                 235                 240

Cys Val Glu Thr Gly Ile Asp Tyr Glu Ile Arg Ser Met Glu Lys Pro
                245                 250                 255

Ser Asp His Ala Pro Val Trp Ala Thr Phe Arg Arg
            260                 265
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<210> 4
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<212> PRT

<213> ARTIFICIAL;MEMBER OF DNase-I SUPERFAMILY

<400> 4

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Leu Lys Ile Ala Ala Phe Asn Ile Arg Thr Phe Gly Glu Thr Lys Met
1               5                  10                  15

Ser Asn Ala Thr Leu Ala Ser Tyr Ile Val Arg Ile Val Arg Arg Tyr
            20                  25                  30

Asp Ile Val Leu Ile Gln Glu Val Arg Asp Ser His Leu Val Ala Val
        35                  40                  45

Gly Lys Leu Leu Asp Tyr Leu Asn Gln Asp Asp Pro Asn Thr Tyr His
    50                  55                  60

Tyr Val Val Ser Glu Pro Leu Gly Arg Asn Ser Tyr Lys Glu Arg Tyr
65                  70                  75                  80

Leu Phe Leu Phe Arg Pro Asn Lys Val Ser Val Leu Asp Thr Tyr Gln
                85                  90                  95

Tyr Asp Asp Gly Cys Cys Gly Asn Asp Ser Phe Ser Arg Glu Pro Ala
            100                 105                 110

Val Val Lys Phe Ser Ser His Ser Thr Lys Val Lys Glu Phe Ala Ile
        115                 120                 125

Val Ala Leu His Ser Ala Pro Ser Asp Ala Val Ala Glu Ile Asn Ser
    130                 135                 140

Leu Tyr Asp Val Tyr Leu Asp Val Gln Gln Lys Trp His Leu Asn Asp
145                 150                 155                 160

Val Met Leu Met Gly Asp Phe Asn Ala Asp Cys Ser Tyr Val Thr Ser
                165                 170                 175

Ser Gln Trp Ser Ser Ile Arg Leu Arg Thr Ser Ser Thr Phe Gln Trp
            180                 185                 190

Leu Ile Pro Asp Ser Ala Asp Thr Thr Ala Thr Ser Thr Asn Cys Ala
        195                 200                 205

Tyr Asp Arg Ile Val Val Ala Gly Ser Leu Leu Gln Ser Ser Val Val
    210                 215                 220

Pro Gly Ser Ala Ala Pro Phe Asp Phe Gln Ala Ala Tyr Gly Leu Ser
225                 230                 235                 240
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Asn Glu Met Ala Leu Ala Ile Ser Asp His Tyr Pro Val Glu Val Thr
                245                 250                 255

Leu Thr
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<210> 5
<211> 336
<212> PRT
<213> ARTIFICIAL;MEMBER OF DNase-I SUPERFAMILY

<400> 5

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Tyr Asp Pro Ile His Glu Tyr Val Asn His Glu Leu Arg Lys Arg Glu
1               5                   10                  15

Asn Glu Phe Ser Glu His Lys Asn Val Lys Ile Phe Val Ala Ser Tyr
            20                  25                  30

Asn Leu Asn Gly Cys Ser Ala Thr Thr Lys Leu Glu Asn Trp Leu Phe
        35                  40                  45

Pro Glu Asn Thr Pro Leu Ala Asp Ile Tyr Val Val Gly Phe Gln Glu
    50                  55                  60

Ile Val Gln Leu Thr Ser Ala Asp Pro Ala Lys Arg Arg Glu Trp Glu
65                  70                  75                  80

Ser Cys Val Lys Arg Leu Leu Asn Gly Lys Cys Thr Ser Gly Pro Gly
                85                  90                  95

Tyr Val Gln Leu Arg Ser Gly Gln Leu Val Gly Thr Ala Leu Met Ile
            100                 105                 110

Phe Cys Lys Glu Ser Cys Leu Pro Ser Ile Lys Asn Val Glu Gly Thr
        115                 120                 125

Val Lys Lys Thr Gly Leu Gly Asn Lys Gly Ala Val Ala Ile Arg Phe
    130                 135                 140

Asp Tyr Glu Asp Thr Gly Leu Cys Phe Ile Thr Ser His Leu Ala Ala
145                 150                 155                 160

Gly Tyr Thr Asn Tyr Asp Glu Arg Asp His Asp Tyr Arg Thr Ile Ala
                165                 170                 175

Ser Gly Leu Arg Phe Arg Arg Gly Arg Ser Ile Phe Asn His Asp Tyr
            180                 185                 190
```

```
Val Val Trp Phe Gly Asp Phe Asn Tyr Arg Ile Ser Leu Thr Tyr Glu
        195                 200                 205

Glu Val Val Pro Cys Ile Ala Gln Gly Lys Leu Ser Tyr Leu Phe Glu
    210                 215                 220

Tyr Asp Gln Leu Asn Lys Gln Met Leu Thr Gly Lys Val Phe Pro Phe
225                 230                 235                 240

Phe Ser Glu Leu Pro Ile Thr Phe Pro Pro Thr Tyr Lys Phe Asp Ile
                245                 250                 255

Gly Thr Asp Ile Tyr Asp Thr Ser Asp Lys His Arg Val Pro Ala Trp
            260                 265                 270

Thr Asp Arg Ile Leu Tyr Arg Gly Glu Leu Val Pro His Ser Tyr Gln
        275                 280                 285

Ser Val Pro Leu Tyr Tyr Ser Asp His Arg Pro Ile Tyr Ala Thr Tyr
    290                 295                 300

Glu Ala Asn Ile Val Lys Val Asp Arg Glu Lys Lys Lys Ile Leu Phe
305                 310                 315                 320

Glu Glu Leu Tyr Asn Gln Arg Lys Gln Glu Val Arg Asp Ala Ser Gln
                325                 330                 335
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